

## SEQUENCE LISTING

<110> Bayer HealthCare AG  
 Golz, Stefan  
 Bruggemeier, Ulf  
 Geerts, Andreas

<120> Diagnostics and Therapeutics for Diseases Associated with Human  
 Phosphodiesterase 11A (PDE11A)

<130> LeA 36 282

<150> EP02021365.8

<151> 2002-09-24

<150> PCT/EP2003/010376

<151> 2003-09-18

<160> 5

<170> PatentIn version 3.3

<210> 1

<211> 1784

<212> DNA

<213> Homo sapiens

<400> 1

```

tggaaagatg ttacttcac tcccagggtt gctcactgca aatacaatcc tgagaactga      60
actagggcct taaagtcctg acatgcatgg cttgggttttg tggattgcct ctctcaacag      120
gtggtgaaat ttaccaaadc ctttgaattg atgtcccaa agtgcagtgc tgatgctgag      180
aacagtttca aagaaagcat ggagaaatca tcatactccg actggctaata aaataacagc      240
attgctgagc tggttgcttc aacaggcctt ccagtgaaca tcagtgatgc ctaccaggat      300
ccgcgctttg atgcagaggc agaccagata tctgggttttc acataagatc tgttctttgt      360
gtccctatctt ggaatagcaa ccaccaata attggagtggt ctcaagtgtt aaacagactt      420
gatgggaaac cttttgatga tgcagatcaa cgactttttg aggcttttgt catcttttgt      480
ggacttggca tcaacaacac aattatgtat gatcaagtga agaagtcctg ggccaagcag      540
tctgtggctc ttgatgtgct atcataccat gcaacatgtt caaaagctga agttgacaag      600
tttaaggcag ccaacatccc tctgggtgtca gaacttgcca tcgatgacat tcattttgat      660
gactttttctc tcgacgttga tgccatgatc acagctgctc tccggatgtt catggagctg      720
gggatgggtac agaaatttaa aattgactat gagacactgt gtaggtgggt tttgacagtg      780
aggaaaaact atcggtatggt tctataccac aactggagac atgccttcaa cgtgtgtcag      840
ctgatgttcg cgatgttaac cactgctggg tttcaagaca ttctgaccga ggtggaaatt      900
ttagcggtga ttgtgggatg cctgtgtcat gacctcgacc acaggggaac caacaatgcc      960
ttccaagcta agagtggctc tgccctggcc caactctatg gaacctctgc taccttggag     1020
catcaccatt tcaaccacgc cgtgatgatc cttcaaagtg agggtcacaa tatctttgct     1080
aacctgtcct ccaaggaata tagtgacctt atgcagcttt tgaagcagtc aatattggca     1140
acagacctca cgctgtactt tgagaggaga actgaattct ttgaacttgt cagtaaagga     1200
gaatacgatt ggaacatcaa aaaccatcgt gatatatattc gatcaatgtt aatgacagcc     1260

```

tgtgaccttg gagccgtgac caaacctggt gagatctcca gacaggtggc agaacttgta 1320  
 accagtgagt tcttcgaaca aggagatcgg gagagattag agctcaaact cactccttca 1380  
 gcaatttttg atcggaaaccg gaaggatgaa ctgcctcggg tgcaactgga gtggattgat 1440  
 agcatctgca tgccttttgta tcaggcactg gtgaagggtca acgtgaaact gaagccgatg 1500  
 ctagattcag tagctacaaa cagaagtaag tgggaagagc tacaccaaaa acgactgctg 1560  
 gcctcaactg cctcatcctc ctcccctgcc agtgttatgg tagccaagga agacaggaac 1620  
 taaacctcca ggtcagctgc agctgcaaaa tgactacagc ctgaagggcc attttcagtc 1680  
 cagcaatgtc atccttttgt tcttttagct cagaaagacc taacatctca aggatgcact 1740  
 gggaaccatg cctgggcttt caccttgaag catggtcagc agca 1784

<210> 2  
 <211> 490  
 <212> PRT  
 <213> Homo sapiens

<400> 2

Met Ser Pro Lys Cys Ser Ala Asp Ala Glu Asn Ser Phe Lys Glu Ser  
1 5 10 15

Met Glu Lys Ser Ser Tyr Ser Asp Trp Leu Ile Asn Asn Ser Ile Ala  
20 25 30

Glu Leu Val Ala Ser Thr Gly Leu Pro Val Asn Ile Ser Asp Ala Tyr  
35 40 45

Gln Asp Pro Arg Phe Asp Ala Glu Ala Asp Gln Ile Ser Gly Phe His  
50 55 60

Ile Arg Ser Val Leu Cys Val Pro Ile Trp Asn Ser Asn His Gln Ile  
65 70 75 80

Ile Gly Val Ala Gln Val Leu Asn Arg Leu Asp Gly Lys Pro Phe Asp  
85 90 95

Asp Ala Asp Gln Arg Leu Phe Glu Ala Phe Val Ile Phe Cys Gly Leu  
100 105 110

Gly Ile Asn Asn Thr Ile Met Tyr Asp Gln Val Lys Lys Ser Trp Ala  
115 120 125

Lys Gln Ser Val Ala Leu Asp Val Leu Ser Tyr His Ala Thr Cys Ser  
130 135 140

Lys Ala Glu Val Asp Lys Phe Lys Ala Ala Asn Ile Pro Leu Val Ser  
145 150 155 160

Glu Leu Ala Ile Asp Asp Ile His Phe Asp Asp Phe Ser Leu Asp Val  
165 170 175

Asp Ala Met Ile Thr Ala Ala Leu Arg Met Phe Met Glu Leu Gly Met  
 180 185 190  
 Val Gln Lys Phe Lys Ile Asp Tyr Glu Thr Leu Cys Arg Trp Leu Leu  
 195 200 205  
 Thr Val Arg Lys Asn Tyr Arg Met Val Leu Tyr His Asn Trp Arg His  
 210 215 220  
 Ala Phe Asn Val Cys Gln Leu Met Phe Ala Met Leu Thr Thr Ala Gly  
 225 230 235 240  
 Phe Gln Asp Ile Leu Thr Glu Val Glu Ile Leu Ala Val Ile Val Gly  
 245 250 255  
 Cys Leu Cys His Asp Leu Asp His Arg Gly Thr Asn Asn Ala Phe Gln  
 260 265 270  
 Ala Lys Ser Gly Ser Ala Leu Ala Gln Leu Tyr Glu Thr Ser Ala Thr  
 275 280 285  
 Leu Glu His His His Phe Asn His Ala Val Met Ile Leu Gln Ser Glu  
 290 295 300  
 Gly His Asn Ile Phe Ala Asn Leu Ser Ser Lys Glu Tyr Ser Asp Leu  
 305 310 315 320  
 Met Gln Leu Leu Lys Gln Ser Ile Leu Ala Thr Asp Leu Thr Leu Tyr  
 325 330 335  
 Phe Glu Arg Arg Thr Glu Phe Phe Glu Leu Val Ser Lys Gly Glu Tyr  
 340 345 350  
 Asp Thr Asn Ile Lys Asn His Arg Asp Ile Phe Arg Ser Met Leu Met  
 355 360 365  
 Thr Ala Cys Asp Leu Gly Ala Val Thr Lys Pro Trp Glu Ile Ser Arg  
 370 375 380  
 Gln Val Ala Glu Leu Val Thr Ser Glu Phe Phe Glu Gln Gly Asp Arg  
 385 390 395 400  
 Glu Arg Leu Glu Leu Lys Leu Thr Pro Ser Ala Ile Phe Asp Arg Asn  
 405 410 415  
 Arg Lys Asp Glu Leu Pro Arg Leu Gln Leu Glu Trp Ile Asp Ser Ile  
 420 425 430  
 Cys Met Pro Leu Tyr Gln Ala Leu Val Lys Val Asn Val Lys Leu Lys  
 435 440 445

Pro Met Leu Asp Ser Val Ala Thr Asn Arg Ser Lys Trp Glu Glu Leu  
 450 455 460

His Gln Lys Arg Leu Leu Ala Ser Thr Ala Ser Ser Ser Ser Pro Ala  
 465 470 475 480

Ser Val Met Val Ala Lys Glu Asp Arg Asn  
 485 490

<210> 3  
 <211> 19  
 <212> DNA  
 <213> Homo sapiens

<400> 3  
 catgacctcg accacaggg 19

<210> 4  
 <211> 19  
 <212> DNA  
 <213> Homo sapiens

<400> 4  
 tagagttggg ccagggcag 19

<210> 5  
 <211> 30  
 <212> DNA  
 <213> Homo sapiens

<400> 5  
 aaccaacaat gccttccaag ctaagagtgg 30